

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3304-044 PAR #: N/A Fault Category: Prod/Machined Parts NCR: Yes No DQA: 15 Date: 08/08/05
QA: N/C Closed: _____ Date: _____

NCR: 40862		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/08/05	3.0	Ø .840 is to small on one part. R.C. Digital readout failed causing machine to take off too much mat.	AB QSLN	Scrap and destroy no mat. to replace. Qty 10	J.F. 08/08/05	S	AB 08/08/05	S

NOTE: Date & initial all entries

Date: Thursday, 31/07/2008 1:38:40 PM
User: Julie Lecocq

Process Sheet

P40908

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 40862

Part Number: D3304044

Job Number:



Seq. #: Machine Or Operation:

Description :

6.0 SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

- 1- Drill as per Dwg D3304 using drill Jig D3304-T1
- 2- Form as per Dwg D3304
- 3- Cut tube to length as per Dwg D3304
- 4- Check with DT8657 JIG
- 4- Deburr

FF 08/08/25 (5)

7.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/08/27 (6)

8.0 D33048

Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

Bracket

Pick:

Qty	Part Number	Description	Batch
1	D3304-8	Bracket	40908 → 3✓

P 08-08-29

9.0 LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld bracket as per Dwg D3304 and QSI 004

L 08-08-29 (X3)

10.0 QC9

+ QC5

VISUAL WELDING INSPECTION



qc9 & qc5 08-08-29 (X3)



qc9 PD 08-08-29

Comment: VISUAL WELDING INSPECTION

11.0 POWDER COATING

POWDER COATING



M 106442



(3X)

Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME: 9:00

320°F

OVEN TEMPERATURE: 320°F

FINISH TIME: 9:30

M-F 08/08/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 31/07/2008 1:38:40 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services			Drawing Name: TUBE ASSEMBLY
Job Number: 40862		Part Number: D3304044	
Job Number:			
Seq. #:	Machine Or Operation:	Description :	
12.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION <i>gl</i> 	
Comment: INSPECT POWDER COAT		08-08-29	(1)
13.0	BLBS0016	PIP PIN	
Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s) PIP PIN Pick: Qty Part Number Description Batch		3,000 <i>m108665</i> FF 08/09/04 (3)	
14.0	CBL460	Loop Sleeve	
Comment: Qty.: 2.0000 Each(s)/Unit Total : 12.0000 Each(s) Loop Sleeve Pick: Qty Part Number Description Batch		6.000 <i>m107234</i> FF 08/09/04 (3)	
15.0	CBL1240	Cable	
Comment: Qty.: 1.0416 f(s)/Unit Total : 6.2496 f(s) Cable Pick: Qty Part Number Description Batch		3.1240 <i>m103927</i> FF 08/09/04 (3)	
16.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1	
Comment: SMALL & MEDIUM FAB RESOURCE 1 Assemble lanyard and pip pin as per Dwg D3304 Identify as D3304-044		FF 08/09/04 (3)	
17.0	QC5	INSPECT WORK TO CURRENT STEP	
Comment: INSPECT WORK TO CURRENT STEP		<i>5080804(43)</i>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 31/07/2008 1:38:40 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 40862

Part Number: D3304044

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

18.0	PACKAGING 1	PACKAGING RESOURCE #1
------	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Identify with P/N and B/N as per Dwg using a permanent fine point marker, then Stock

Location: ST188

AS 08/09/08 (3)

19.0	QC21	FINAL INSPECTION/W/O RELEASE
------	------	------------------------------



08/09/05 JY

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 08-09-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	40862
Description: Tube Assembly	Part Number:	D3304-3
Inspection Dwg: D3304	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

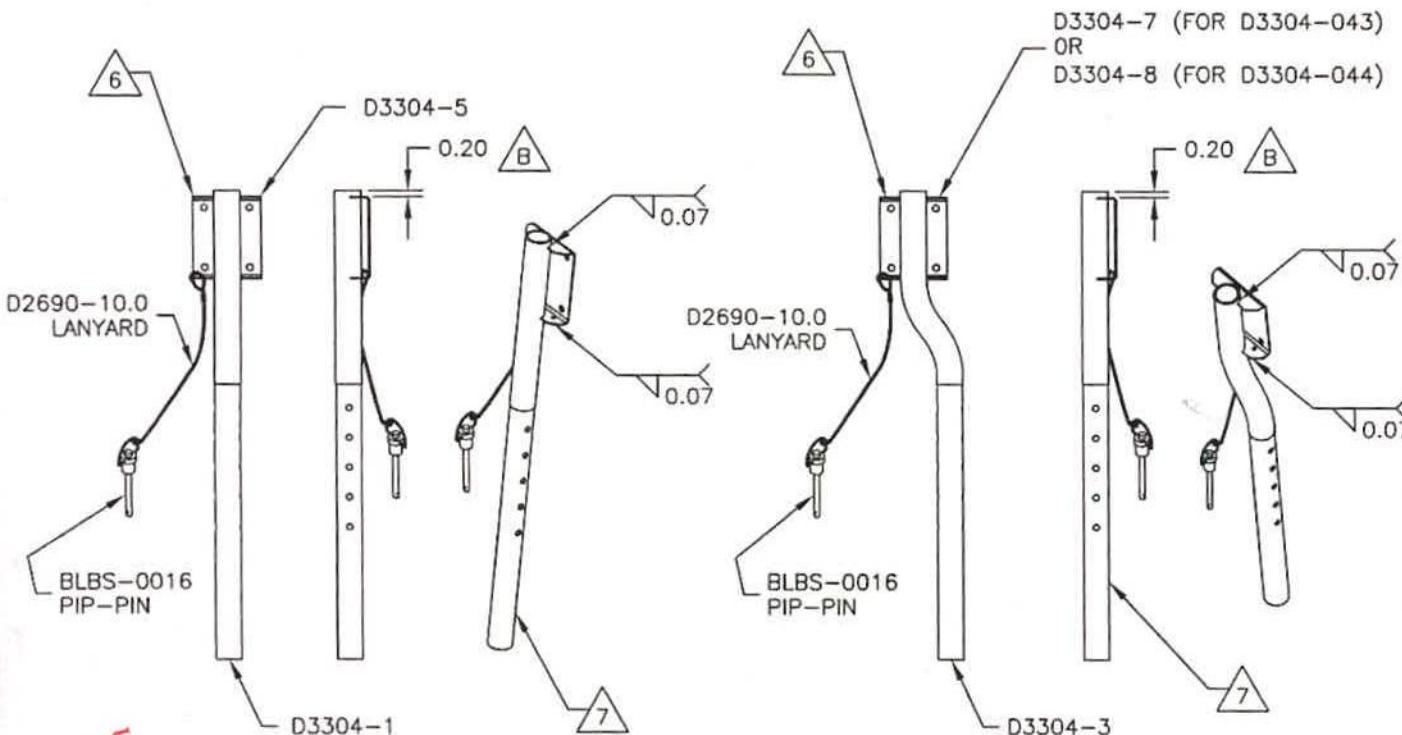
X First Article Prototype

Measured by:	J. F.	Audited by:	J. Wolf	Prototype Approval:	N/A
Date:	08/08/05	Date:	06.06.06	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.09.08	New Issue P/O D3304-043/-044	KJ/JLM	<i>[Signature]</i>
B	06.03.09	Dwg Rev updated	KJ/JLM	<i>[Signature]</i>

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. D3304
DATE 05.07.15		SCALE 1:6
A 04.08.18		TITLE TUBE ASSEMBLY
B 05.07.15		SHEET 1 OF 4
		REV. B



D3304-044 TUBE ASSEMBLY (SHOWN)
D3304-043 OPPOSITE

RELEASED
25.08.11
H

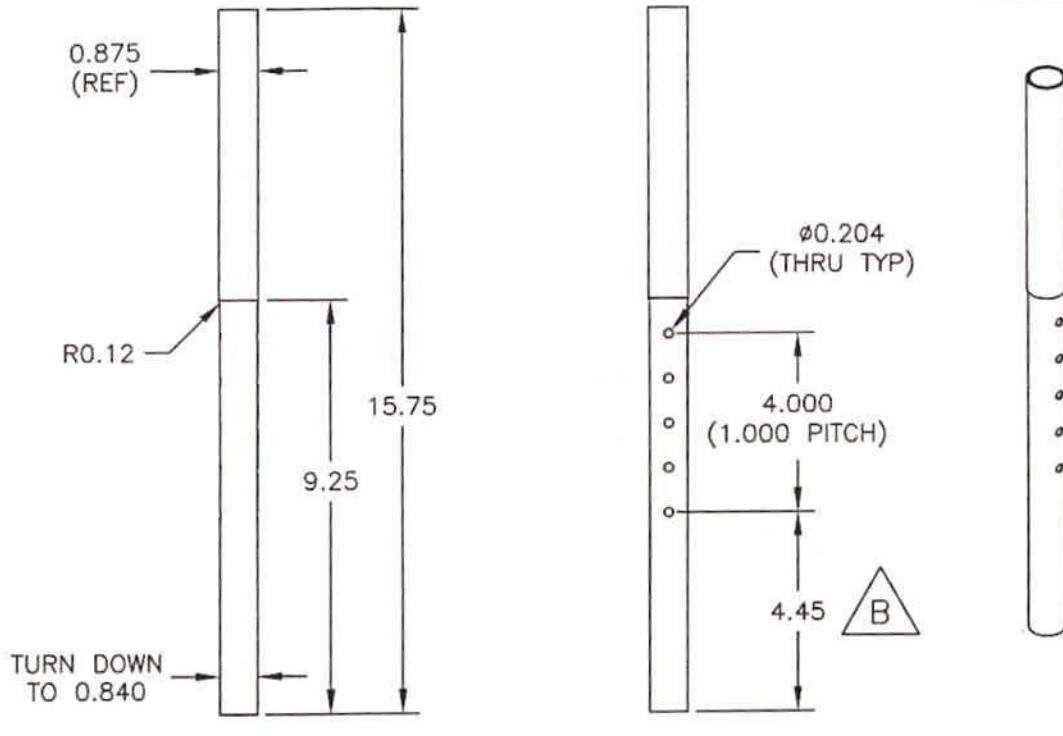
D3304-041/-043/-044 NOTES:

- 1) FINISH: POWDER COAT GREY SANTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 2) WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) IDENTIFY AS INDICATED USING FINE POINT PERMANENT INK MARKER "TCCA-PDA, DART AEROSPACE LTD, P/N D3304-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"
- 7) IF BEING ASSEMBLED WITH D3303-041, ADD THE FOLLOWING USING A FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD, P/N D412-724-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

UNCONTROLLED AMENDMENT
SHARP COPY
RETURN TO
ENGINEERING COPY
D3304-041 TUBE ASSEMBLY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 4086

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>HH</i>	APPROVED <i>HH</i>	DRAWING NO. D3304	REV. B SHEET 2 OF 4
DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:4

RELEASED
05.08.11 *HH***D3304-1 TUBE****D3304-1 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE $\varnothing 0.875 \times 0.065$ WALL
(REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

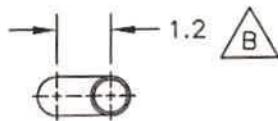
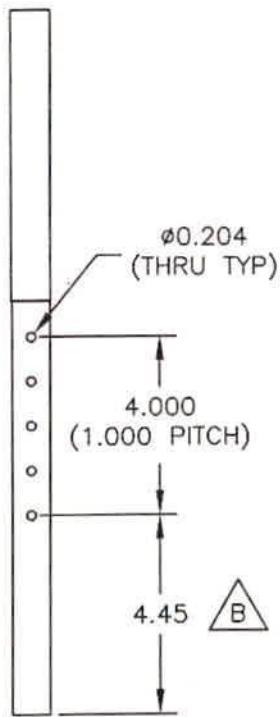
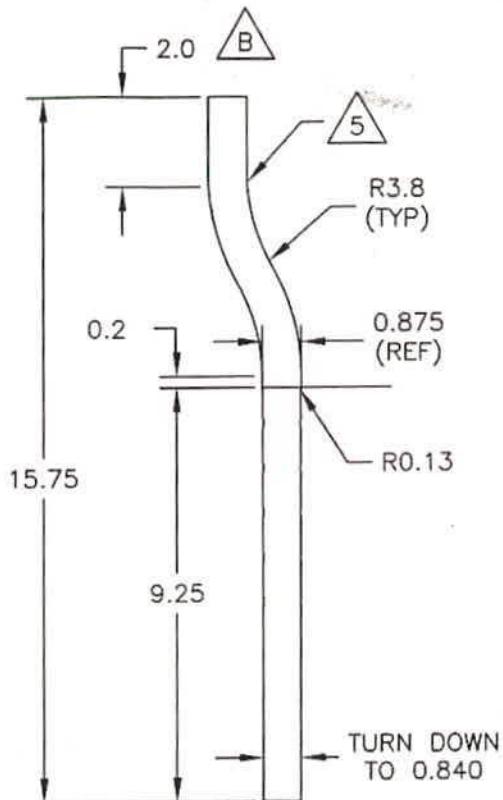
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 10862

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3304	REV. B SHEET 3 OF 4
DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:4

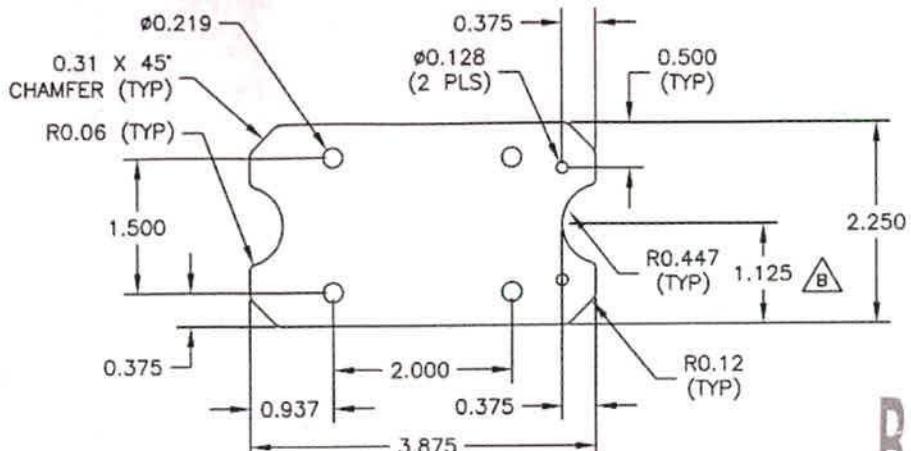
**D3304-3 TUBE****D3304-3 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE $\varnothing 0.875 \times 0.065$ WALL
(REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) BEND LINES 9.625, 13.375 DIMENSIONS

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *46862*

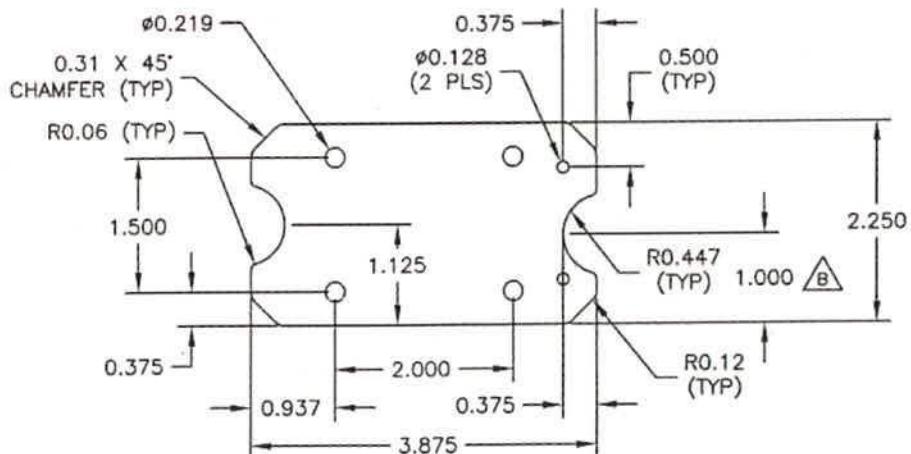
DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[initials]</i>	APPROVED <i>[initials]</i>	DRAWING NO. D3304	REV. B SHEET 4 OF 4
DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:2

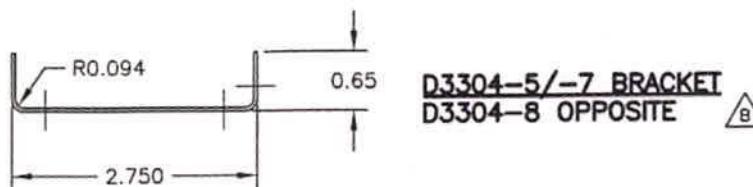


RELEASED
05.08.11 *[initials]*

D3304-5 FLAT PATTERN



D3304-7/-8 FLAT PATTERN



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *40862*

NOTES:

- 1) MATERIAL: AISI 304/316 SS 0.040 THICK SHEET (REF. DART SPEC M304S20GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015